SOCIOLOGICAL PERSPECTIVES OF THE STUDY OF THE WAR FACTOR IN THE DYNAMICS OF COMPLIANCE WITH ANTI-PANDEMIC MEASURES (ON THE EXAMPLE OF FRONT-LINE KHARKOV)

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Summary

The article examines public opinion, reflecting the attitude towards the pandemic in the front-line city of Kharkov. The direct threat to life provoked by the war pushed the antiepidemic security measures to the background, and the mass consciousness and behavior, steadily tuned in to the observance of the minimum components of anti-pandemic precautions, replaced COVID-19 with war. With the outbreak of a full-scale war in Ukraine, antiepidemiological regulations aimed at combating COVID-19 ceased to operate, which had its own social consequences, which are gradually disclosed in the article. As part of the research work No0121U109814 «Sociological and mathematical modeling efficiency of management of social and epidemic processes for ensuring the national security of Ukraine», a series of blitz interviews was conducted, which made it possible to draw conclusions about how the perception of the pandemic among citizens.

In March-April 2022, 8 in-depth interviews were conducted with residents of front-line Kharkov. The results of this intelligence study allow us to put forward a hypothesis: the war did not just push the coronavirus threat to the periphery of the mass consciousness, but shifted its perception towards doubting its seriousness.

Key words: COVID-19, vaccination, pandemic, war in Ukraine, blitz interview; public opinion.

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1. Introduction

The COVID-19 pandemic, in addition to a purely medical dimension, has plunged countries around the world into extreme social conditions. The fact that these conditions differed during the periods of the peaks of each wave and during the periods of attenuation of these waves does not negate the extreme nature of the social conditions of the pandemic as a whole. The rapid forced tightening of the rules of social life that accompanied the development of the pandemic was unprecedented for today's humanity. Citizens of Ukraine, like many others, seemed unlikely to encounter a higher degree of extreme social conditions. However, the war embodied this small probability with all persuasiveness.

On February 24, the extreme nature of social conditions for the citizens of Ukraine multiplied instantly. War itself does not just multiply the risks to human health: it makes life threats permanent and everyday. Because of this, health risks in wartime are often not defined by the mass consciousness as medical and are placed in a separate category. However, the routinization of health threats in wartime is not limited to whims in classification processes. One of its effects is a rethinking – or, more precisely, «overloading» – health threats that were relevant in the pre-war period, with a sharp decrease in their significance as a result.

On the rise of COVID-19, we clearly see that the pre-war relevance does not mean the de-actualization of the threat in the war. The priorities in the perception of Ukrainians are shifting, but objectively, the coronavirus still remains one of the main problems. Today, the situation with coronavirus is relatively controlled – this has been confirmed by the World Health Organization. WHO growth that the random number of deaths from COVID-19 has decreased by 90%, which means since the beginning of the year. However, despite the success of vaccination, herd immunity is still not achieved, the level remains high. So, if in February 2022 the weekly number of deaths exceeded 75 thousand, then in the last week of October 2022, WHO recorded a little more than 9400 deaths worldwide. «We have come a long way and this is definitely cause for optimism. But we continue to call on all governments, communities and people to remain vigilant»¹, WHO Director-General Tedros Adhanom Ghebreyesus said. At the same time, the World Health Organization notes that new strains of the disease continue to spread and the fight against the virus is in the active phase, which means that the vaccination process should not stop.

This is confirmed by the autumn surge of the virus in many countries. From October 31 to November 6, the number of new reported cases of coronavirus in the world was 2.1 million. By the end of November 2022, COVID-19 incidence records were updated in China: on November 25, more than 35,000 new cases were detected per day. Now the authorities of 31 provinces, on the territory of which there are also several huge megacities, are reporting outbreaks of the disease. Among them are the capital Beijing (more than 22 million inhabitants), a large shopping center in the south of the country Guangzhou (18.5 million), and several others.

In Ukraine, according to the Ministry of Health, in the last week of October, 16,378 new confirmed cases of coronavirus disease COVID-19 were detected. Among the confirmed cases of infection, 1641 were found in children and 273 in health workers. In addition, from 24 to 30 October, 99,204 people were vaccinated against COVID-19. Of all vaccinations given, 8.8% were first doses, 8.6% were second doses, 68.7% were first booster doses, and 13.9% were second booster doses. Also, for the week, the following indicators were recorded:

- hospitalized 3900 people,
- deaths 179,
- recovered 29,413 people.

At the same time, for the entire time of the pandemic in Ukraine:

- fell ill 5,312,632 people,
- recovered -5,155,465 people,
- deaths 110 186,
- tests carried out (by PCR and express) 32 707 848².

WHO reports 90% drop in world COVID-19 deaths since February – https://www.cbsnews.com/news/covid-19-deaths-drop-since-february-world-health-organization/

² Official telegram channel of the Ministry of Health of Ukraine https://t.me/mozofficial/3070

It is clear that the statistics presented may not reflect the real situation with coronavirus in Ukraine, since some of the infected do not seek medical help. But even the official data provided is enough to confirm that COVID-19 still poses a real threat. Due to the increase in the incidence, including seasonal, in some regions, it was decided to resume the mask regime at the official level. For example, at the end of October, Cherkasy, Sumy, and Kyiv regions decided to return to the mask regime due to an increase in the incidence of coronavirus disease. First of all, we are talking about observance of the mask regime in the mall, trade establishments, public catering and other socially important facilities and transport.

The focus of our attention is the Kharkiv region, due to the border position and constant hostilities, which greatly hinder vaccination in the region. At the end of October, according to local authorities, the situation in Kharkiv and the region was under control. The mask regime has not been officially introduced, but residents are encouraged to get vaccinated. As of October 31, since the beginning of the pandemic, 314,435 laboratory-confirmed cases of coronavirus have been registered in the region, of which 304,465 patients have recovered, 7,213 people have died³.

In addition to a noticeable increase in the incidence, doctors note that the symptoms of coronavirus have changed. According to medics, today the disease in mild forms can affect disorders of the gastrointestinal tract. In difficult cases, the coronavirus begins to «hit» the cardiovascular and cerebrovascular systems and even manifest itself as a stroke or heart attack. That is, the virus can be recognized as a disease that is not infectious in nature, which greatly complicates the process of making a diagnosis and determining the treatment protocol.

Thus, our study is actual because the coronavirus threat persists and the COVID-19 pandemic is ongoing with the renewal of virus strains. This issue is especially acute in Ukraine, which is in hyper extreme conditions due to ongoing hostilities since February 24, 2022. The city of Kharkov, which to this day has a front-line status, spent the first months of the war in maximum tension. The situation was literally military, the city outskirts were under heavy artillery fire, rocket and air strikes were carried out on the territory of all districts of the city. In February-March, most of the city's retail chains and outlets stopped their work. Municipal transport did not work, taxi services almost did not function; the stations of the stopped subway were used as permanent shelters, where Kharkiv residents hid with their families, not going out for weeks. Most of the pharmacies were also closed; it became a huge problem to get even the simplest medicines. In this situation, all anti-pandemic precautions were completely forgotten or deliberately discarded. None of the Kharkiv residents wore masks even in places of extreme crowding. Such places were not only the already mentioned metro stations, but also the railway station, bus stations, crowded with citizens trying to get out of Kharkov, which had suddenly become critically dangerous. In the waiting rooms, on the platforms, in the train cars and inside the buses, the crowds were so dense that during the trip those who stood could not move. In different parts of the city, crowded queues lined up in the few working supermarkets and bread stalls. A large number of residents of apartment buildings hid in basements, where they were also placed very close to each other. In all the listed locations, no one remembered observing anti-pandemic precautions, even the simplest masks. Moreover, even crossing the borders of other states by refugees from Ukraine, at least in the first months of the military confrontation, took place without observing anti-pandemic measures. In extreme circumstances, counter-COVID information and propaganda work was

³ Almost 115,000 vaccinations against COVID-19 have been carried out in Kharkiv Oblast since the beginning of the full-scale invasion of the Russian Federation – https://kharkivoda.gov.ua/news/118131

automatically curtailed; in the first months of hostilities, «booster» doses of vaccines against COVID-19 were not available.

The **problematic situation** has become absolutely clear: the fight against the COVID-19 pandemic has been completely pushed out of the agenda by the war. The immediate and obvious threat to life has not only relegated anti-epidemic security measures to the background, but completely deprived them of their significance, reducing even sustainable daily habits. The attention of the population switched to a more acute danger as the only one, ignoring all other threats, including the epidemic. Mass consciousness and behavior, steadily tuned in to the observance of the minimum components of anti-pandemic precautions, replaced COVID-19 with war.

We see an obvious and large-scale **problem** in a sharp increase in socio-epidemic risks due to a general decrease in anti-pandemic control and precautions during the war. We believe that the most important aspect of the ontological dimension of this problem is not only a general decrease in attention to the symptoms of COVID-19, ignoring social distance in crowded places, refusal to wear masks, but also the strengthening of the positions of anti-vaccinators and «corona conspiracy theorists». The described components of the problem, combined with the disruption of the medical statistics and pandemic alert services during the war, created a new argumentative field for the aforementioned quasi-ideologies. This is manifested, for example, in the mass distribution of the formula of black humor: «The war defeated COVID». The use of an «obvious» decrease in the COVID-19 threat (in fact, the effect of a decrease in media attention to it) when faced with the threat of war is interpreted by anti-vaccination propagandists as evidence of the illusory nature and artificial hypertrophy of the COVID-19 threat. And this, in turn, creates additional difficulties of a social and socio-psychological nature in the fight against a pandemic that is in no hurry to retreat.

The epistemological aspect of the problem lies in the lack of scientifically based information about the mechanism of changes in mass attitudes towards the threat of the spread of coronavirus infection, about the prospects for further reducing the motivation of the masses in the implementation of anti-pandemic behavioral practices. Based on this, several urgent **research questions** can be formulated:

- to what extent the rejection of safe practices is due to the panic effect, and to what
 extent the lack of internal (internalized) belief in the meaningfulness of anti-pandemic security
 measures:
- how has the value-setting attitude towards the fight against COVID-19 changed, whether the resource for restoring safe behavior patterns has been preserved, and what are the conditions (in addition to the end of hostilities) for this restoration;
- what is the role in the formation and strengthening of socio-epidemic risks (namely, in the de-intensification of information coverage of the anti-pandemic fight) of the media sphere and higher medical state management;
- Finally, how receptive is the mass consciousness to the updated argumentative platforms of anti-vaccinators and «corona-conspiracy theorists», in particular, to the conditional argument «they don't get sick with covid during the war»?

Undoubtedly, questions of the structural and organizational level of social life are also important and interesting; for example, what is the scale of the decline in anti-pandemic control or how the COVID workload of medical institutions in Kharkiv has changed. However, the level at which the questions proposed by us are concentrated is the level of social relationships, the level of mass consciousness, social perception; this level is much more indicative of the intersection of social and medical problems. And it has long been clear that the solution of

anti-pandemic tasks is inextricably linked precisely with the level of social relationships, with the effectiveness of social and socio-political communication in a particular society, etc. groups that can act as locomotives for correcting mass skepticism about the effectiveness and justification of anti-pandemic control measures (Lytovchenko, Muradyan, Chumachenko. (2021); Lytovchenko, Boyko, Baieva, Ostapenko (2021); Lytovchenko, Boyko, Nekhaienko O., Yashkina, Muradyan (2021)), as well as the social dimension of anti-pandemic control in general (Nekhaienko, Boyko, Chumachenko (2021); Nekhaienko, Boyko (2021)). And in the problem raised by us in this article, we are also interested in aspects that lie in the plane of the social dimension of the COVID-19 pandemic, because if other aspects are constantly in the field of view of various specialists, it is sociologists who must deal with social aspects in order to mass protests or irrational indifference to one's own security did not become an unexpected and insurmountable obstacle to anti-pandemic measures developed by national and world organizations.

Of course, all the research questions formulated above cannot receive exhaustive answers within the framework of one article. We see the **purpose of this article** in clarifying the direction of further sociological research in this issue: it is necessary to determine how large-scale and deep the shift in mass perceptions of the significance of the threat of a pandemic is, how actors explain to themselves such drastic changes in mass assessments, how likely it is to further reduce the motivation of social masses in the observance of anti-pandemic precautions and what are the possible measures to counteract this decrease. The exploratory nature of our work does not imply a narrower specification of the goal: we are interested in all possible ways of further sociological research on the problem of the factorial role of the military situation in the extraordinary dynamics of attitudes and perceptions of the COVID-19 pandemic.

Coronavirus threat: perception in military Kharkiv. Research methodology. The need to clarify the directions of sociological reflection of a conditionally outlined problem field made it inevitable to turn to qualitative methods of sociological research. Technically, our task is to transform research questions into a valid hypothesis; observation, focused group interviews, or in-depth interviews are best suited for such tasks. However, in the first months, filled with the most acute military actions, it was extremely difficult to conduct such research in Kharkov. Constant shelling, a high level of projectile and missile danger in all districts of Kharkov, problems with transport made direct contact with informants as difficult as possible and significantly limited the possibilities of observation (in fact, everything that observation could give during this period is reflected by us in the introductory part of the article, in the description of the problem situations). These technical obstacles could be overcome with the help of technical means: sociology has accumulated sufficient experience in conducting both focused group and in-depth interviews remotely, using various video platforms. However, the content difficulty was really significant: the majority of Kharkovites were in a state of deep stress, provoked by the shock of the war, parting with loved ones (by that time there were already many dead among peaceful Kharkovites, many Kharkov families were separated after evacuation), material losses. In addition, for sociological research, a sharp decrease in the readiness of the majority of Kharkiv residents remaining in the city for a frank conversation with strangers was especially significant. The ideological and political views of Kharkiv residents, even in wartime, remained quite diverse; this ruled out the possibility of conducting a focus group study on any socially significant, sensitive topic that did not even directly affect the ideological aspects of military operations. These obstacles were also relevant for in-depth interviews; however, there remained such a form, quite suitable for exploratory research, as a blitz interview. The essence of this technique is simple: the interview guide is compressed to three or four main questions, the main purpose of which is to obtain indirect information. The average duration of the interview is also reduced. At the same time, the information richness of the interview is not lost, and the fact that the informant does not know about the research being conducted gives the blitz interview the character of an experiment. Of course, this technique is not self-sufficient, and is suitable only for solving reconnaissance tasks; however, they are the main ones in our case.

The problems of access to informants described above prompted us to choose taxi drivers as informants. This is a rather specific nominal group, the representations of which in most cases lack uniformity and cannot be extrapolated to other social groups. However, these representations are not hermetic, and to some extent contain the opinions of other groups of citizens that taxi drivers encounter as passengers, which also satisfies our objectives. In addition, taxi drivers possess – albeit not on a stereotypically «solid» scale, but many – the most important quality for our special research conditions; communication skills. As part of the research topic No0121U109814 «Socio-mathematical modeling of the effectiveness of managing social and epidemic processes to ensure the national security of Ukraine», in March-April 2022, we conducted a blitz interview in Kharkiv with taxi drivers of one of the Kharkiv online taxi services. For taxi drivers, these were ordinary charter trips; each trip lasted at least twenty minutes; each blitz interview started as a normal conversation. Of the eleven taxi drivers we tried to talk to, eight willingly kept up the conversation and thus took part in the flash interview. Each interview contained questions about attitudes towards (non)compliance with anti-pandemic measures in war; at the same time, in six of the eight interviews, the interviewer practically did not have to give additional questions, and three taxi drivers actually started a conversation on the topic of COVID-19 themselves.

2. Results

During the interview, all informants themselves came up with such sub-topics as attitudes towards vaccination, assessments of the prospects for a pandemic threat. Six out of eight independently reproduced the thesis «they don't get sick with covid during the war» (in different formulations, for example, informant 1: «the war defeated the «corona», informant 3: «organisms mobilized because bombs are worse than the virus»). The two-remaining reacted to the very first mention by us of the thesis about the retreat of the coronavirus infection in military conditions. At the same time, different interpretations of the described situation were voiced, which can be summarized as follows:

- a) the pandemic danger was initially exaggerated, «inflated», with the outbreak of the war, the need to update this topic disappeared, and the media stopped talking about COVID-19, and people, accordingly, immediately forgot about it:
- informant 1: «TV does not talk about the «corona», there is a marathon everywhere, so everyone was «cured»;
- **informant 5:** «If everyone didn't buzz about the epidemic on every corner then, it would be like this now. What people hear is what they react to. Now we have war everywhere here, but the «crown», it turns out, is nowhere»;
- b) war is more dangerous than a coronavirus disease, so Kharkiv residents, trying to save their lives, simply ignore the task of the «lower» level, although the pandemic threat remains;
- **informant 3:** «Well, I don't know if the virus has actually decreased; I just think that people are not up to it. Well, here you are going to look for bread, here at any moment you can fly in, well, as if not up to the mask, you understand»;

- **informant 7:** «Of course, I looked in the subway there well, most of them are without masks, maybe only one in twenty. Well, the crowd, yes, there is generally unsanitary conditions. But just right there, like: "covid", maybe it will cling, or maybe not. And if «hail» flies through your window, then it's for sure, so to speak. And people, when they fled from the apartments, didn't even take all the normal clothes, what kind of masks are there, what a distance»;
- c) the coronavirus threat is artificial, it is the result of a large-scale conspiracy or a secret experiment on people's minds; but war as such an experiment is more effective, so the propaganda machine stopped pumping the masses with fear of COVID-19, and measures against the pandemic struggle were canceled by themselves;
- **informant 2:** «And the «coronavirus» is simply not needed now, you know. Well, look, there is a war, you can no longer convince anyone, but simply directly force it. Show the barrel there, show the gun, that's all, that's enough. I have already forgotten when I heard about this COVID-19 on TV, but earlier, remember: every day, so many got sick, so many died. Everyone was afraid, but now they are even more afraid, because the war is more terrible. And with frightened people, you can do anything. Previously, they were not allowed out of the houses, because the virus was terrible, but now they were driven into basements, because the bombs are terrible, and the virus is no longer needed»;
- **informant 8:** «I think so, if the pandemic were true, then nothing would be lost right away, right? My nephew was traveling through Lvov to Poland well, before the war, no one was let out without a certificate about the vaccine, but now they didn't even ask, they didn't even ask! Well, there's just no need to lie, that's all».

It should be noted that in three cases the same informants voiced two (first and second) interpretations at the same time, that is, they are not necessarily perceived as alternative.

The attitude towards anti-pandemic control measures was formulated in two ways: 1) they are not necessary (due to the fact that the threat of COVID-19 is either exaggerated or completely imitated); 2) it would be nice if the citizens were reminded of the minimum-security measures – washing hands, wearing face masks:

- **informant 2:** «Of course, now we don't even remember about these masks. Yes, you need to show the whole world, listen. We show the war, how they destroy us here. Let's open Europe's eyes to Russia so let's open this nonsense with the coronavirus. Just to show: look, everyone is without masks, all in a crowd, and there are no sick people, huh?»
- **informant 4:** «In a good way, we should organize everything. Do not force people themselves well, not before that there is some old woman in the basement. But just as volunteers from the city council give water and bread there, they can also give out masks. I guarantee that not all, but a third of the people there would use it, it won't hurt».

At the same time, almost all informants showed varying degrees of skepticism about the continuation of vaccination. Informants rated it in general as superfluous (due to exaggeration or falsification of the threat):

— **informant 6**: «No, I think that everything is done with vaccination. What else do you think will be vaccinated? So, no one will come here. No, well, they were so afraid, maybe they were going, but now it's clear that this whole pandemic is overblown, so why inject yourself with some kind of nonsense?»

or as no longer relevant (due to the objective reduction of pandemic danger and the achievement of the required level of vaccination, or due to objective difficulties caused by the war):

- **informant 3**: «It is hardly worth working with vaccines further. First, look, immunity is a complicated thing, in a normal situation it takes a long time to form, and then we were all

shaken up. And the first vaccines, it seems to me, are just enough now. It's crazy money to buy everything. Ukraine is simply not up to it. And you can't force people, vaccines will deteriorate. For those who left, let them get vaccinated abroad.»

Only one informant, a young man with a secondary technical medical education (which he himself reported, explaining his position by this), stated that vaccination should be continued, despite the war.

The last interesting block of information obtained during the blitz interview is «educational conspiracy theories»: the reproduction of information from anti-vaxxer publics, telegram channels, from conspiracy YouTube videos and blogs. Three informants enthusiastically explained that the war did not just "defeat" COVID-19, but showed the absolute correctness of those who consider the coronavirus threat a fiction, the result of a global medical and political conspiracy. All three, in different formulations, voiced the same «conclusion»: in military Kharkiv, "no one dies from the coronavirus," because the secret conspirators fail to maintain a falsified picture of medical statistics and news in military conditions:

- **informant 2:** «They need to work on all fronts, so to speak, in order to keep the picture. And now they have a different front, and the picture is different. That's it, the pandemic is over. But they said from the very beginning that there can't be such a pandemic from a simple mutant flu, it's for chickens to laugh at»;
- **informant 8:** «There, an educated person writes, well, he is a doctor, a virologist there, you understand. He writes bluntly: that's it, we've arrived, war, of course, is evil, but it can also be useful. And now all this, which was drowned for the «coronavirus», the edge has come. I'm telling you; we'll see how the revelations go after the war. Although they will pay off anyway, there are such capacities in this WHO, with these pharmacists. But now it will be harder to lie».

It should be noted that emotions of irony and irritation prevailed in the blitz interview: the topic of the coronavirus during the war is perceived by informants as fascinating, but not serious, anecdotes and "meme phrases" are quite enough to discuss it.

3. Conclusions

We emphasize once again: the results of the study do not allow us to draw any conclusions due to the specifics of the methodology itself (for example, only men participated in the blitz interview, which already significantly narrows the range of opinions presented). We limited the study to search tasks. The results of our **intelligence research** show that all of the research questions we have posed are promising for further research. The data obtained allow us to put forward a hypothesis that the war did not just push the coronavirus threat to the periphery of mass consciousness, but shifted its perception towards skepticism, either conspiracy theory or empirical. The verification of this hypothesis requires the search for an answer to all the research questions posed by us. And this is possible only when conducting a series of sociological studies using both qualitative and quantitative methods. Particular attention should be paid to the everyday discourse of the pandemic threat, content analysis of media messages (especially video blogs and Telegram channels) on the topic of coronavirus in military conditions, focus group interviews and mass polls in relation to vaccination, conspiracy theories, including indicators of deep internalization of attitudes on compliance with anti-pandemic measures.

Finally, even at this stage, it is possible to preliminarily formulate the directions of social engineering activities necessary to correct the problem situation. For example, it is necessary to form a package of counter manipulative measures to overcome the effect of the

"obvious" argument about the «impossibility» of coronavirus disease during the war. This package should include tools operating in the «new media sphere»: there is reason to believe that traditional media, including television, play a minimal role (compared to video blogs and telegram channels) in the dissemination of updated conspiracy ideas about coronavirus and antivaccination messages. Specification of these tools, predictive assessment of their effectiveness, monitoring content correction can and should also become tasks solved by sociological tools.

References

- 1. Lytovchenko A., Muradyan O., Chumachenko D. (2021) Coping with the COVID-19 Pandemic: Efficiency and Prospects in Plasma Donors' Perceptions. Proceedings of the International Conference on Social Science, Psychology and Legal Regulation (SPL 2021) 18 December 2021. pp. 7–13. https://doi.org/10.2991/assehr.k.211218.002
- 2. Lytovchenko, A., Boyko, D., Baieva, M., Ostapenko, H. (2021). Instruments and Perspectives of Coping with Pandemic COVID-19 in the Assessments of Medical Workers of the Kharkiv Region. Sociological Studios, 19 (2), 79–86. https://doi.org/10.29038/2306-3971-2021-02-79-86 3. Lytovchenko, A., Boyko, D., Nekhaienko O., Yashkina D., Muradyan E. (2021) Donory plazmy v socialno-informacionnom pole v usloviyah pandemii [Plasma donors in the social and information field in a pandemic]. Science and Education a New Dimension. Humanities and Social Sciences, IX(47), I.: 258. P. 42–46 https://doi.org/10.31174/SEND-HS2021-258IX47-09 4. Boyko, D., Nekhaienko O. (2021) Dyskurs vaktsynatsii vid COVID-19: modeliuvannia dyskursyvnykh praktyk (na prykladi donoriv plazmy krovi) [The discourse of vaccination against COVID-19: modeling discursive practices (using the example of blood plasma donors)] «Habitus», №29. PU «Prychornomorskyi naukovo-doslidnyi instytut ekonomiky ta innovatsii» s. 16–21 URL: DOI https://doi.org/10.32843/2663-5208.2021.29.2
- 5. Nekhaienko Oksana, Boyko Dmytro, Chumachenko Tatyana (2021) Socio-group Agents Promoting Vaccination against Covid-19: A Comparative Analysis of the Positions of Medical Workers and Blood Plasma Donors Proceedings of the International Conference on Social Science, Psychology and Legal Regulation (SPL 2021). Atlantis Press, 2352–5398, DOI: https://doi.org/10.2991/assehr.k.211218.003